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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,301	09/01/2006	Goran Sundholm	U 016469-2	9248

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EXAMINER	
HARP, WILLIAM RAY	
ART UNIT	PAPER NUMBER
3651	
MAIL DATE	DELIVERY MODE
05/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,301	SUNDHOLM, GORAN	
	Examiner	Art Unit	
	William R. Harp	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the amendment to the claims entered March 10, 2009 in response to a Non-final Office Action mailed October 10, 2008.

2. Claims 1-28 are pending. Claim(s) 1-22 is/are currently amended. Claims 23 -28 are newly presented. The previously presented claim objections and rejections under 35 U.S.C. 112 are hereby withdrawn.

3. Examiner acknowledges the amendment to the specification entered March 10, 2009 in response to a Non-final Office Action mailed October 10, 2008. The previously presented objections to the specification and the drawings are hereby withdrawn.

Response to Arguments

4. Applicant's arguments filed March 10, 2009 have been fully considered but they are not persuasive. Applicant argues, on Pages 18-19, that steam does not meet the limitations of a liquid mist. However, Webster's New Basic Dictionary defines mist as "water vapor that condenses" and further defines steam as "the mist that forms when hot water vapor cools and condenses". Therefore, one of ordinary skill would consider steam to be a liquid mist.

5. The examiner hereby maintains the previously presented rejections under 35 U.S.C. 102 and 35 U.S.C. 103, as well as the previously presented double patenting rejections, which follow below.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 14, 16, 17, 21, 25, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Tolman (USPN 1965866).

8. Regarding Claim 1, Tolman teaches a method for conveying material by means of a pressure difference in a conveying pipe (18), in which method the material is fed to a conveying pipe (through aperture 20), and further in the conveying pipe to a separator device (10, 17) in which the transferred material is separated from conveying air, in which method underpressure is achieved to the conveying pipe with an ejector apparatus (46) the suction side of which is combined with the separator device (Figure 4), which ejector apparatus is operated with an actuating medium (steam P2, L123-133), wherein liquid mist is utilized as the actuating medium of the ejector apparatus.

9. Regarding Claim 14, Tolman teaches an apparatus (Figure 4) for conveying material, by means of a pressure difference in a conveying pipe (18), which apparatus comprises a conveying pipe for the material, a separator device (17), and a means for achieving underpressure to the conveying pipe with an ejector apparatus (46) the suction side of which is connected to the separator device, which ejector apparatus is operated with an actuating medium (steam, P2, L123-133), wherein the ejector apparatus comprises at least one nozzle (illustrated in Figure 4 inside ejector 46) for spraying liquid mist and utilizing as the actuating medium of the ejector and a means (52, 53) for feeding the liquid for the nozzle.

10. Regarding Claim 16, the nozzle is arranged to the suction pipe (16).

11. Regarding Claim 17, Tolman teaches a least one ejector nozzle (46), an ejector pipe (16), and a separator member (10).

12. Regarding Claim 21, Tolman teaches a means for separating liquidous and/or solid matter from the gas flow (10, 17).

13. Regarding Claim 23 and 24, the ejector apparatus (46) is directed at the separator member (10).

14. Regarding Claims 25 and 28, the liquid mist is aqueous liquid mist.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 2 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman as applied to claim 1 above, and further in view of British Document (GB 288862, hereafter GB '862).

18. Regarding Claims 2 and 15, Tolman teaches the limitations above, yet fails to teach the sprayed liquid is collected and recirculated. GB '862 teaches a collecting means (r) for collecting and re-using water used in an ejector [P2, L108-116]. It would have been obvious to collect and re-circulate the sprayed liquid to increase the efficiency of the process.

19. Claims 3 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman as applied to claim 1 above, and further in view of Morohashi et al. (USPN 6974279).

20. Regarding Claim 3, Tolman teaches the limitations above, yet fails to teach that the medium is sprayed with several nozzles. Morohashi et al. teaches an ejector (Figure 4) with several nozzles (15a, 22). It would have been obvious to use several nozzles to increase the suction effect of the ejector apparatus.

21. Regarding Claim 22, Tolman teaches the limitations above, yet fails to teach a rotating movement in the separating means. Morohashi et al. teaches a cyclone separator (7), the operation of which is well known in the art to produce a rotational movement of the material inside. It would have been obvious achieve a rotating movement inside the separator to facilitate separate of the constituents.

22. Claims 4-11, 13, 18-20, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman as applied to claim 1 above, and further in view of EPO Document (EP 1179682 A2, hereafter '682) and Morohashi et al..

23. Regarding Claims 4, 5, 6, 13, 18, 26, and 27 Tolman teaches the limitations above, yet fails to teach a second medium. '682 teaches an ejector utilizing a second medium (Figure 2, Q3). '682 further teaches that the second medium is a liquid [Para. 9] medium and that the liquid may be water. Morohashi et al. teaches that air, a gaseous medium may be used instead [C8,

L62-65]. It would have been obvious to utilize a second medium to clean the ejector and that the second medium could be a liquid or gas, depending on the application.

24. Regarding Claim 7, Tolman teaches the limitations above, yet fails to teach the proportion of the second medium and the actuating medium is regulated. '682 teaches that the flow rate of Q3 can be set optimally depending on the configuration of the ejector and/or the flow rate of Q2 [Para. 15]. It would have obvious to regulate the proportion of the mediums as taught by '682.

25. Regarding Claims 8-10, Tolman teaches the limitations above, yet fails to teach the how the second medium is sprayed in relation to the ejector device. '682 teaches (Figures 2, 3, and 4) that the second medium can be injected at various locations as desired. It would have been obvious to specify the location of the second medium as required by the application.

26. Regarding Claim 11, Tolman teaches the limitations above, and further teaches an air washing chamber (10) that separates the sprayed water from the gas flow. Tolman fails to teach the second medium, however, '682 teaches the second medium as described above. It would have been obvious to separate the second medium from the gas flow in a manner similar to the separation of the water and gas flow as taught by Tolman.

27. Regarding Claims 19 and 20, Tolman teaches the limitations above, yet fails to teach a nozzle for bringing the second medium. '682 teaches a nozzle (10) for bringing the second medium. It would have been obvious to use a nozzle to introduce the second medium into the ejector. Further, the ejector produces a vacuum by which to draw fluid Q2 into the ejector. It would suffice to say that it would produce a vacuum in the nozzle (10) as well, which would draw the liquid Q3 into the ejector.

28. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman as applied to claim 1 above, and further in view of Morohashi et al. and Japanese Document (JP 9301504, hereafter '504, abstract provided by applicant).

29. Regarding Claim 12, Tolman teaches the limitations above, yet fails to teach odor elimination or suction effect intensification by the second medium. Morohashi et al. teaches, as described above, the intensification of the suction effect by the second medium. '504 teaches supplying a deodorizing agent (abstract). It would have been obvious to use the second medium to eliminate odors in refuse conveying.

Double Patenting

30. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

31. Claims 4-13 and 18-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of copending

Application No. 10591302. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter of the instant application is fully encompassed by the subject matter of copending Application No. 10591302.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William R. Harp whose telephone number is (571) 270-5386. The examiner can normally be reached on Monday - Thursday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/
Supervisory Patent Examiner, Art Unit 3651

/W. R. H./
Examiner, Art Unit 3651